CLAIMS

What is claimed is:

1	1. A method for building and displaying interactive, control and non-interactive						
2	information, selectively, on a touch panel comprising the steps of:						
3	constructing a page for display on the touch panel;						
4	configuring a plurality of graphical display units in association with said page for						
5	display on the touch panel;						
6	displaying the page and one or more of said graphical display units, selectively, on						
7	said touch panel; and						
8	determining whether any of said graphical display units is activated by a touch						
9	message comprising an amount of pressure applied to a location on said touch panel.						
1	2. The method of Claim 1 wherein:						
2	each of said graphical display units is configured to have a total touch area on the						
3	touch panel comprising, collectively, an active touch area and a non-active area, the active						
4	touch area of a first graphical display unit overlapping a non-active area of a second						
5	graphical display unit; and						
6	said determining step comprises determining whether said touch message location is						
7	within the active touch area of any graphical display unit being displayed on said touch						
8	panel.						

of the total touch area of a particular graphical display unit; and analyzing each point along the plotted line to determine whether the touch mess		2 The most of a Coloine 2 and a min will discuss the same of
of the total touch area of a particular graphical display unit; and analyzing each point along the plotted line to determine whether the touch mess location coincides with any portion of the active touch area of the particular graphical dunit. 4. The method of Claim 2 wherein said determining step comprises: determining the position of said touch message location on said touch screen; identifying each of the graphical display units having a portion of its total touch that coincides with said touch message location; for each of said identified graphical display units, mathematically plotting a line between the touch message location and the perimeter of the corresponding total touch a forming an analysis order for said identified graphical display units; analyzing each point along each line associated with each identified graphical di unit to determine if the said touch message location coincides with at least a portion of the active touch area of one of said identified graphical display units; and activating a particular graphical display unit when the touch message location is found to coincide with at least a portion of the active touch area of said particular graphical found to coincide with at least a portion of the active touch area of said particular graphical found to coincide with at least a portion of the active touch area of said particular graphical found to coincide with at least a portion of the active touch area of said particular graphical found to coincide with at least a portion of the active touch area of said particular graphical found to coincide with at least a portion of the active touch area of said particular graphical found to coincide with at least a portion of the active touch area of said particular graphical found to coincide with at least a portion of the active touch area of said particular graphical found to coincide with at least a portion of the active touch area of said particular graphical found.	1	3. The method of Claim 2, wherein said determining step comprises:
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found to coincide with at least a portion of the active touch area of said particular graph	10	active touch area of one of said identified graphical display units; and
found to coincide with at least a portion of the active touch area of said particular graph	11	activating a particular graphical display unit when the touch message location is
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5. The method of Claim 4 wherein:

two of said graphical display units are displayed on said touch panel so that their respective active touch areas are separated from each other by no more than one pixel.

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- 1 6. The method of Claim 1, wherein:
- each of said graphical display units is selectively provided with one or more features
- from a group of features that includes a bitmap, an icon, text and a border.
- The method of Claim 6, wherein:
- said graphical display units, including features thereof, are respectively provided with
- 3 one or more colors.
- 1 8. The method of Claim 6, wherein:
- one or more of said graphical display units each has two or more states.
- 1 9. The method of Claim 8, wherein:
- said configuring step comprises building the state of one or more of said graphical
- 3 display units.
- 1 10. The method of Claim 6, wherein:
- at least one of said graphical display units comprises a bargraph having at least two
- 3 states.
- 1 11. The method of Claim 6, wherein:
- said text feature includes a font selected from a set of fonts, and a text effect selected
- 3 from a set of text effects.
- 4 12. The method of Claim 1, wherein:
- said method includes the step of configuring one or more sub-pages in association
- 6 with said page, at least one of said sub-pages comprising a video feed.

1	13. A method for building and displaying interactive, control, non-interactive and						
2	non-control information, selectively, on a touch panel, said method comprising the steps of:						
3	selecting a page having two or more states for display on the touch panel;						
4	directing a state of the selected page to random access memory;						
5	constructing a graphical display unit for use with the selected page;						
6	storing said constructed graphical display unit in a graphical display unit cache;						
7	setting the opacity of said graphical display unit;						
8	storing the graphical display unit in random access memory;						
9	configuring a sub-page associated with the selected page;						
10	storing said sub-page in a sub-page cache;						
l 1	storing said sub-page in random access memory;						
12	copying the state of the selected page, the graphical display unit and the sub-page						
13	from random access memory to video random access memory;						
14	displaying the state of the page from video random access memory onto the touch						
15	panel; and						
16	displaying said graphical display unit and said sub-page from video random access						
17	memory onto the selected page on the touch panel.						
1	14. The method of Claim 13, wherein:						
2	said graphical display unit has one or more colors.						
1	15. The method of Claim 13, wherein:						
2	said graphical display unit is selectively provided with one or more features from a						
3	group of features that includes text and one or more bitmaps, icons and borders.						

1	16. The method of Claim 13, wherein:
2	said graphical display unit is a repeating graphical display unit.
1	17. The method of Claim 13, wherein:
2	said graphical display unit has two or more states, and said method includes
3	determining the state of said graphical display unit.
1	18. A method for animating a graphical display unit comprising the steps of:
2	setting a max state and a min state for the graphical display unit, the graphical display
3	unit having two or more states;
4	determining each state that exists between the max state and the min state;
5	receiving a command to activate the graphical display unit;
6	upon receipt of the command to activate the graphical display unit in connection with
7	a specified state, setting the state of the graphical display unit to the min state;
8	sequentially displaying each state between the min state and the max state until the
9	max state is the state of the graphical display unit; and
10	upon achieving the max state of the graphical display unit, resetting the state of the
11	graphical display unit to the min state, and then sequentially displaying each state between
12	the min state and the max state until the specified state is the state of the graphical display
13	unit.
13	unt.
1	19. The method of claim 18, wherein;
2	said step of sequentially displaying each state further comprises the step of retrieving

each state between the min state and the max state from a graphical display unit cache.

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20.	The	method	of Claim	119.	wherein:
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- said step of sequentially displaying each state further comprises the step of building each state between the min state and the max state that has not been previously built and stored in the graphical display unit cache.
- 1 21. A computer system for building and displaying interactive, control and non-2 interactive information, selectively, on a touch panel, said system comprising:
- a processor; and

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- a computer readable medium connected to the processor, said computer readable medium including processor instructions configured to be read by said processor and thereby cause said processor to:
- 7 construct a page for display on the touch panel;
- configure a plurality of graphical display units in association with said page for display on the touch panel;
- display the page and one or more of said graphical display units, selectively, on said touch panel; and
- determine whether any of said graphical display units is activated by a touch message comprising an amount of pressure applied to a location on said touch panel.
 - 22. The system of Claim 21 wherein:
- each of said graphical display units is configured to have a total touch area on the touch panel comprising, collectively, an active touch area and a non-active area, the active touch area of a first graphical display unit overlapping a non-active area of a second graphical display unit; and
- said processor determines whether said touch message location is within the active touch area of any graphical display unit being displayed on said touch panel.

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23.	The system	of Claim 22	wherein	said	processor.
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- mathematically plots a line between said touch message location and the perimeter of the total touch area of a particular graphical display unit; and
- analyzes each point along the plotted line to determine whether the touch message
 location coincides with any portion of the active touch area of the particular graphical display
 unit.

24. The system of Claim 22, wherein said processor:

- determines the position of said touch message location on said touch screen;
- identifies each of the graphical display units having a portion of its total touch area that coincides with said touch message location;
- for each of said identified graphical display units, mathematically plots a line between the touch message location and the perimeter of the corresponding total touch area;
- 7 forms an analysis order for said identified graphical display units;
 - analyzes each point along each line associated with each identified graphical display unit to determine if the said touch message location coincides with at least a portion of the active touch area of one of said identified graphical display units; and
 - activates a particular graphical display unit when the touch message location is found to coincide with at least a portion of the active touch area of said particular graphical display unit.

25. The system of Claim 24, wherein said processor:

two of said graphical display units are displayed on said touch panel so that their respective active touch areas are separated from each other by no more than one pixel.

- 1 26. The system of Claim 21, wherein:
- each of said graphical display units is selectively provided with one or more features
- from a group of features that includes a bitmap, an icon, text and a border.
- 1 27. The system of Claim 26, wherein:
- said graphical display units, including features thereof, are respectively provided with one or more colors.
- 1 28. The system of Claim 26, wherein:
- one or more of said graphical display units each has two or more states.
- 1 29. The system of Claim 28, wherein:
- 2 said processor builds the state of one or more of said graphical display units.
- 1 30. The system of Claim 26, wherein:
- at least one of said graphical display units comprises a bargraph having at least two states.
- 1 31. The system of Claim 26, wherein:
- said text feature includes a font selected from a set of fonts, and a text effect selected from a set of text effects.
- 1 32. The system of Claim 21, wherein:
- said processor configures one or more sub-pages in association with said page, at
- 3 least one of said sub-pages comprising a video feed.